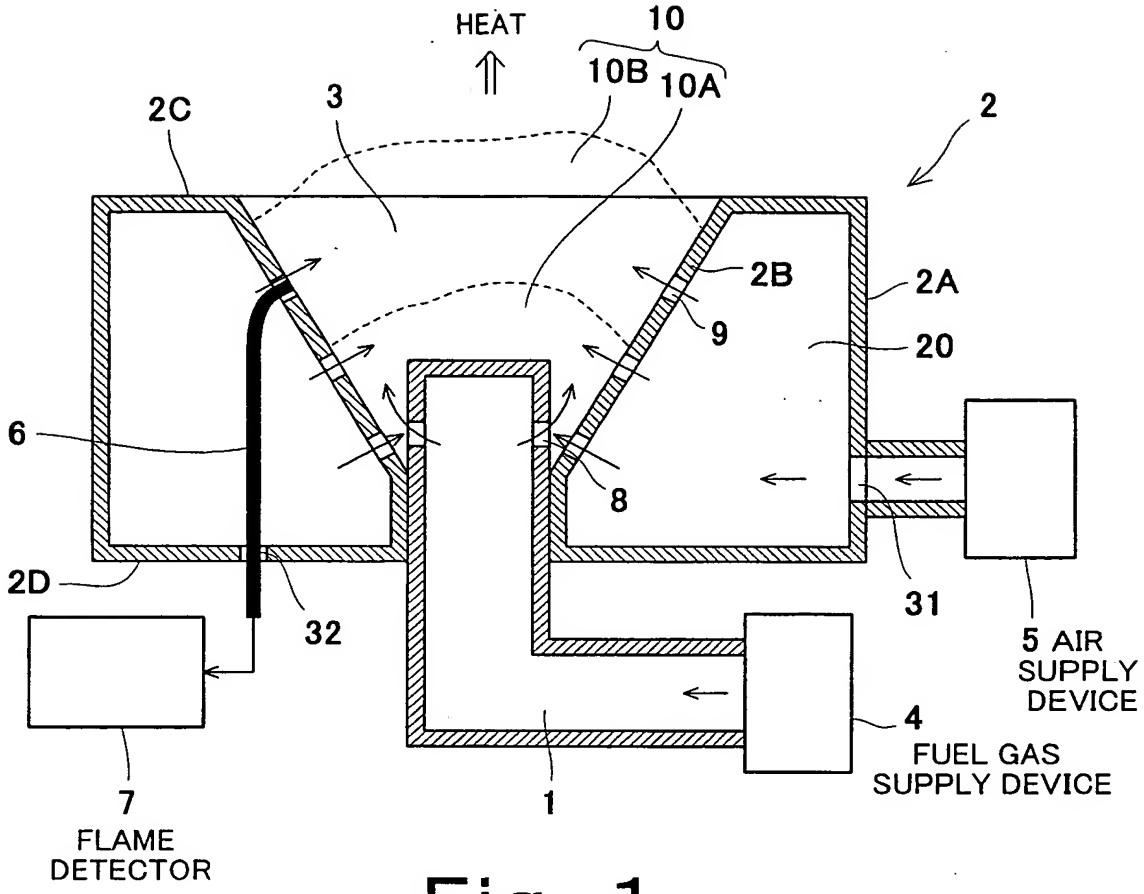
HEAT
10
10B
10A
2C
3
2
2B
2A
9
20
6
8
2D
32
31
5 AIR SUPPLY DEVICE
4
FUEL GAS SUPPLY DEVICE
7
FLAME DETECTOR
1

Fig. 1

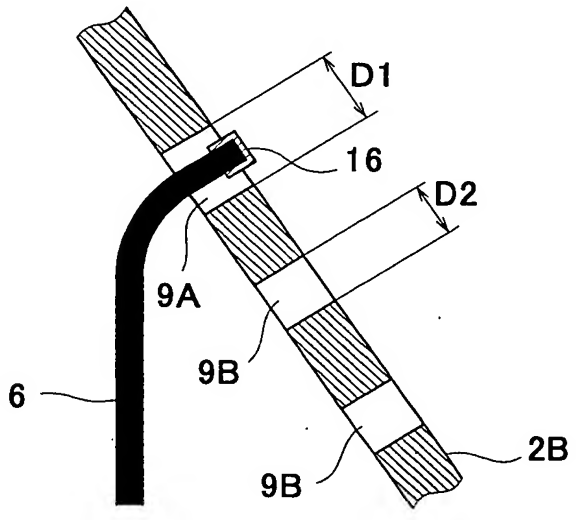
D1
16
D2
9A
9B
6
2B
9B

Fig. 2

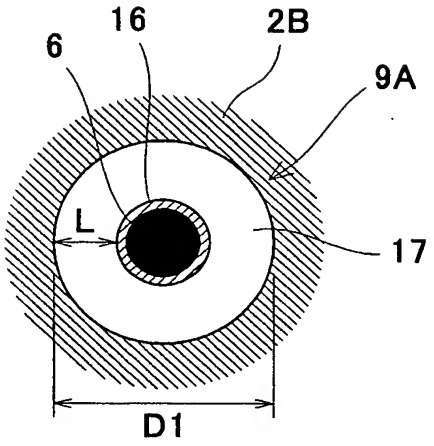

Fig. 3

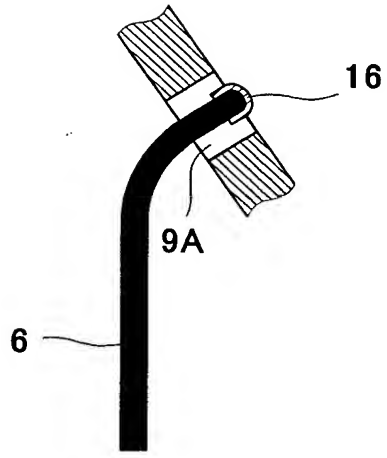

Fig. 4

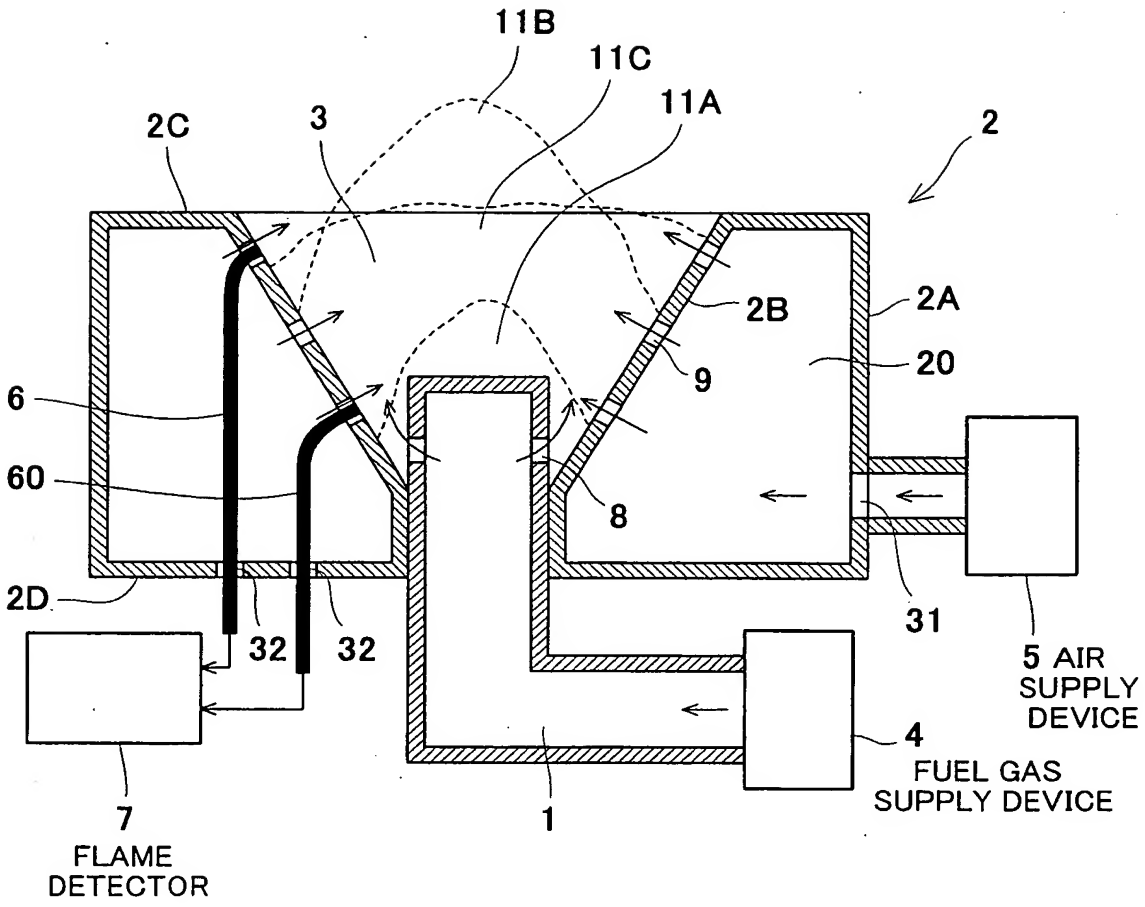
11B
11C
11A
2C
3
2
2B
2A
9
20
6
60
8
2D
31
32
32
5 AIR SUPPLY DEVICE
4
FUEL GAS SUPPLY DEVICE
7
FLAME DETECTOR
1

Fig. 5

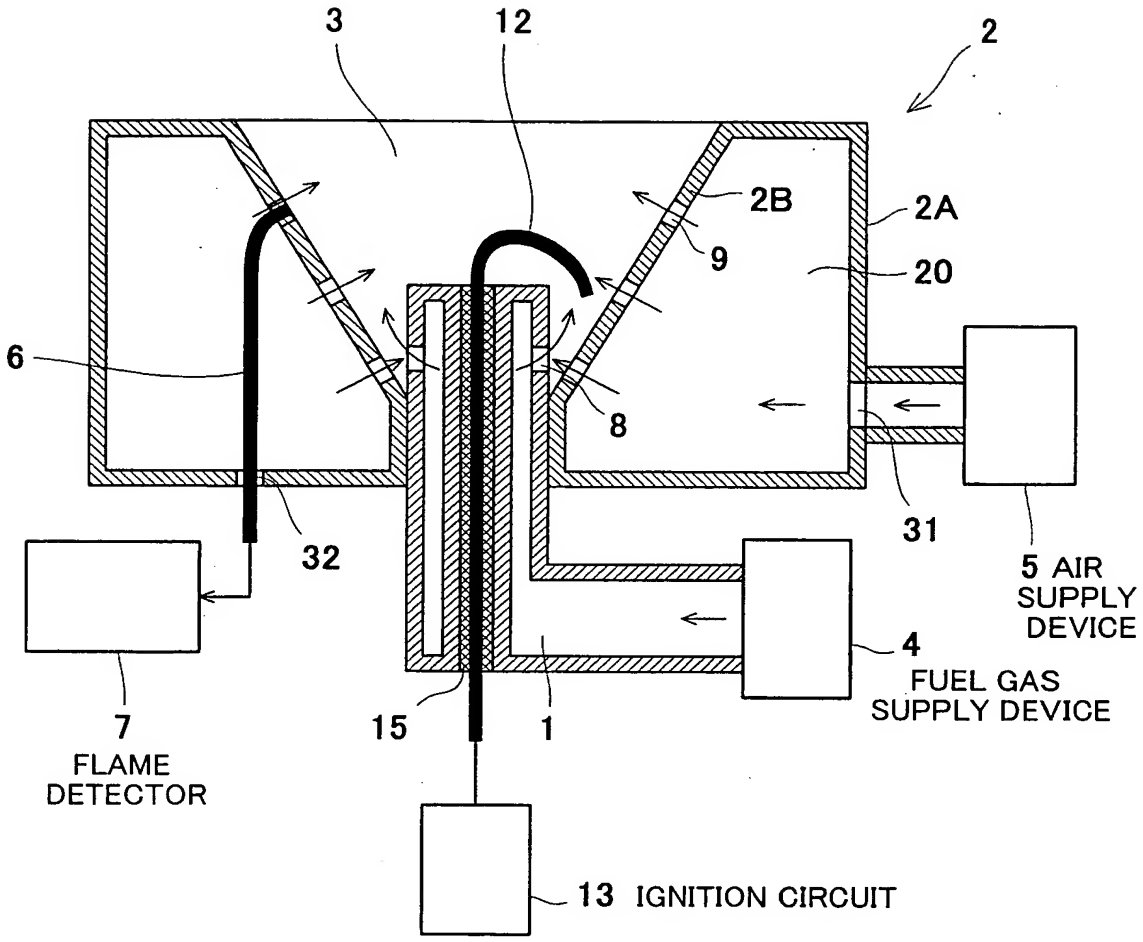
3
12
2
2B
2A
9
20
6
8
31
32
5 AIR SUPPLY DEVICE
4
FUEL GAS SUPPLY DEVICE
7
FLAME DETECTOR
15
1
13 IGNITION CIRCUIT

Fig. 6

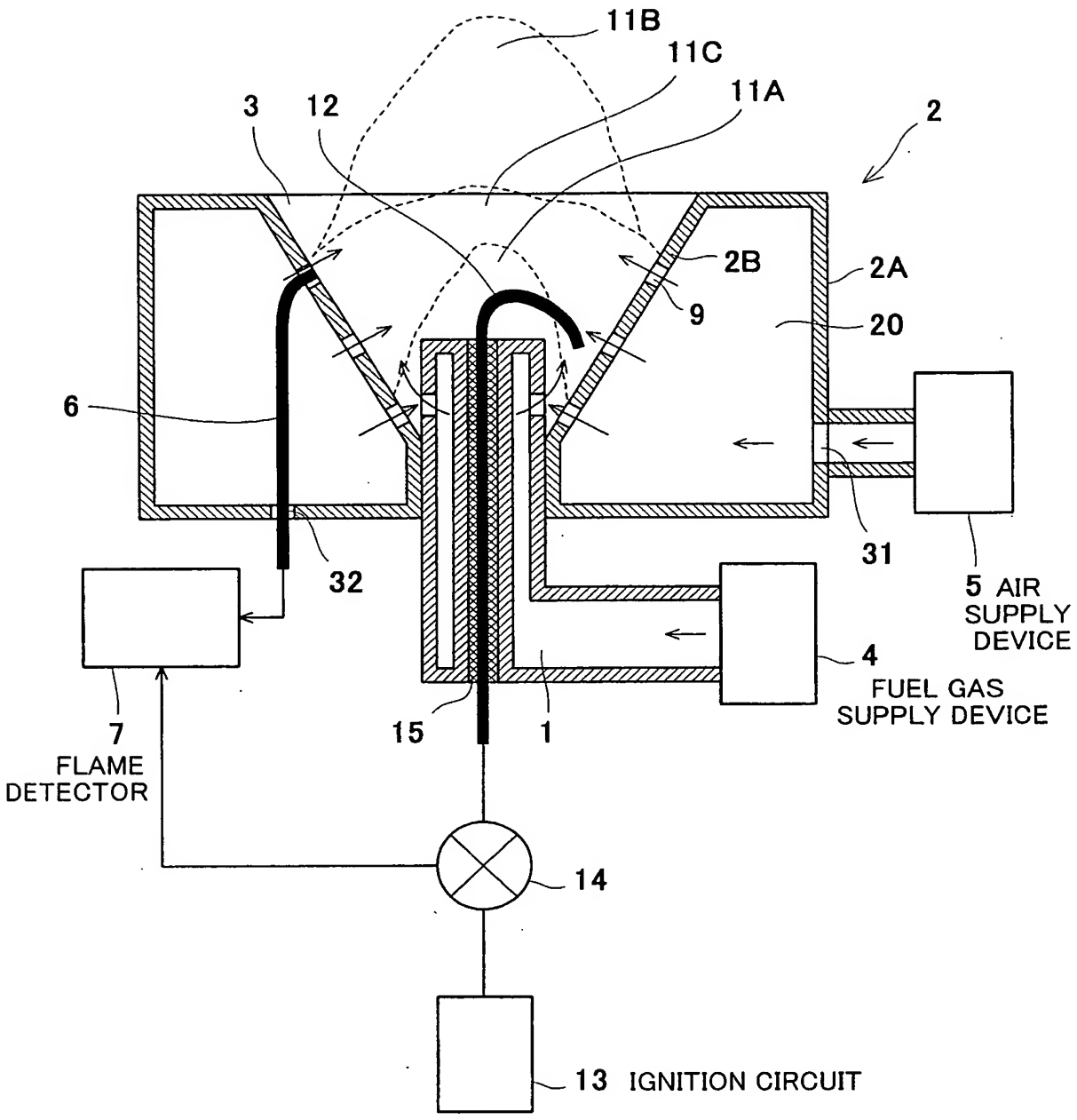
11B
11C
11A
3
12
2
2B
2A
9
20
6
31
32
5 AIR SUPPLY DEVICE
4
FUEL GAS SUPPLY DEVICE
7
FLAME DETECTOR
15
1
14
13 IGNITION CIRCUIT

Fig. 7

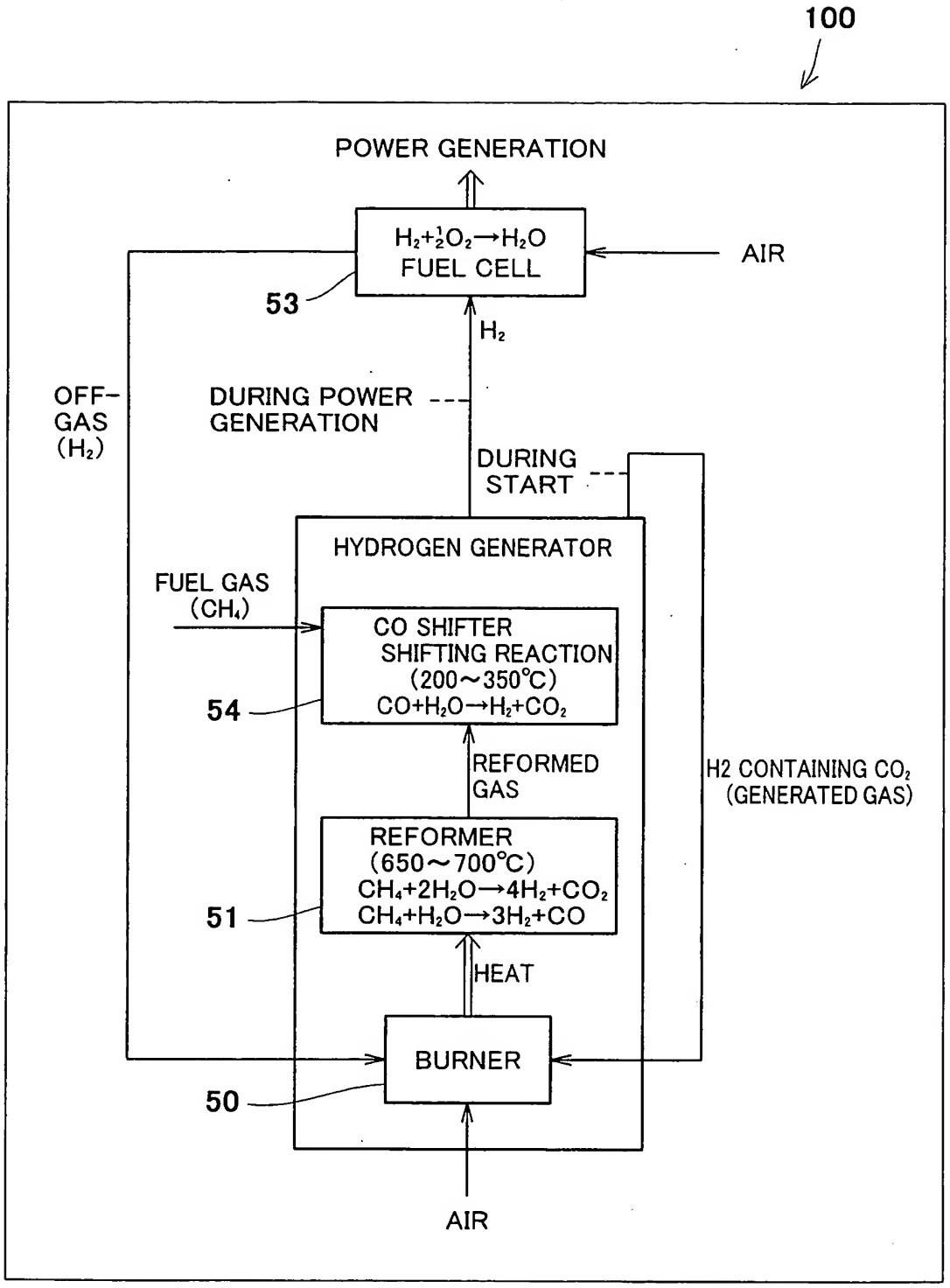
100
POWER GENERATION
$H_2+\frac{1}{2}O_2 \rightarrow H_2O$
FUEL CELL
AIR
53
H_2
OFF-GAS (H_2)
DURING POWER GENERATION
DURING START
HYDROGEN GENERATOR
FUEL GAS (CH_4)
CO SHIFTER
SHIFTING REACTION
(200～350°C)
$CO+H_2O \rightarrow H_2+CO_2$
54
REFORMED GAS
H2 CONTAINING CO_2 (GENERATED GAS)
REFORMER
(650～700°C)
$CH_4+2H_2O \rightarrow 4H_2+CO_2$
$CH_4+H_2O \rightarrow 3H_2+CO$
51
HEAT
BURNER
50
AIR

Fig. 8

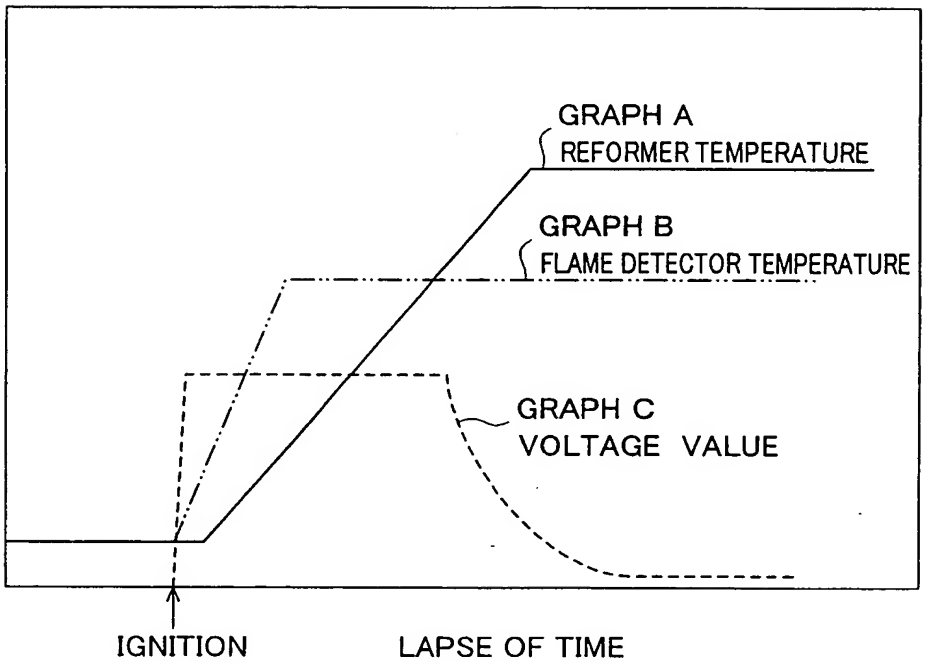
GRAPH A
REFORMER TEMPERATURE
GRAPH B
FLAME DETECTOR TEMPERATURE
GRAPH C
VOLTAGE VALUE
IGNITION
LAPSE OF TIME

Fig. 9